



# Roof sandwich panels installation manual

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The structural treatment of the color steel products enclosing structure is an important part of the building function and architectural image of the color steel enclosing structure. The structural drawings should be carefully studied and detailed, and each part has rules to follow when installation, in order to avoid the arbitrariness of construction installation.

## **1,Direction:**

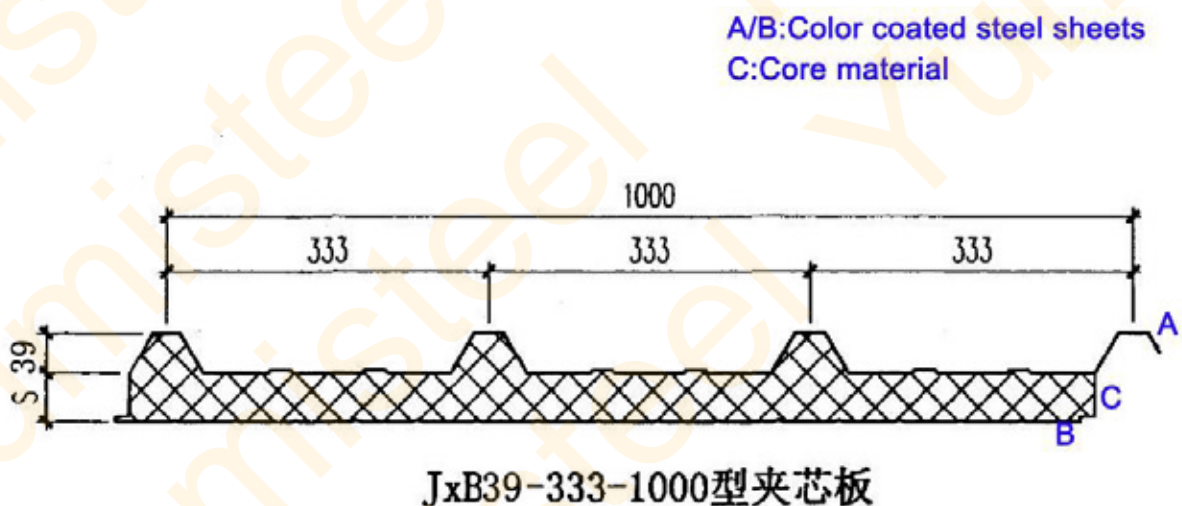
- 1) This manual is suitable for site handling and installation of Yumi wall sandwich panels, and its basic installation guidance manual;
- 2) Before installing Yumi wall sandwich panels and related flashings, please read this installation guidance manual and your project construction drawings carefully, in order to make sure smooth installation;
- 3) The safety shown in this manual is basic information and does not include the suitability of the user and the safe size of each project. The contractor must verify that all safety devices and their load parameters have been verified by architects and engineers and are in compliance with the

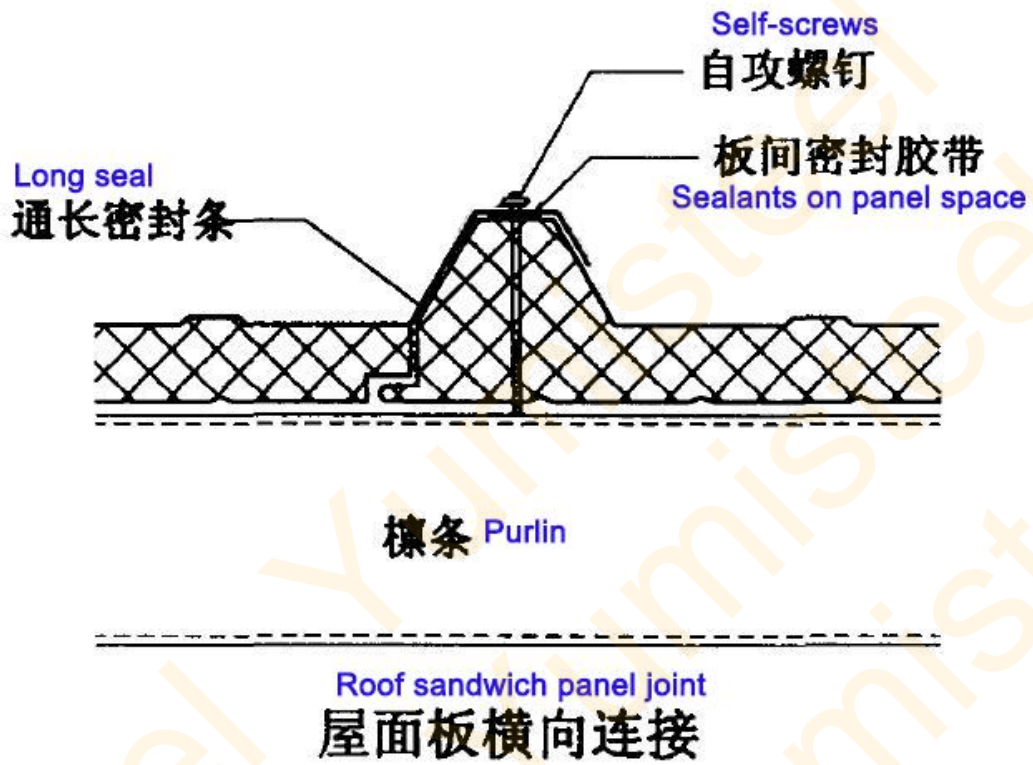
Code and the environment;

4) Proper construction procedures and safety measures, in conjunction with this manual and construction drawings, ensure that the project is installed at the lowest cost and fastest speed and with high quality;

5) Any amendments and improvements to this manual will be explained in a later reprint and will be updated in a timely manner.

## 2, Roof panel type introduction:

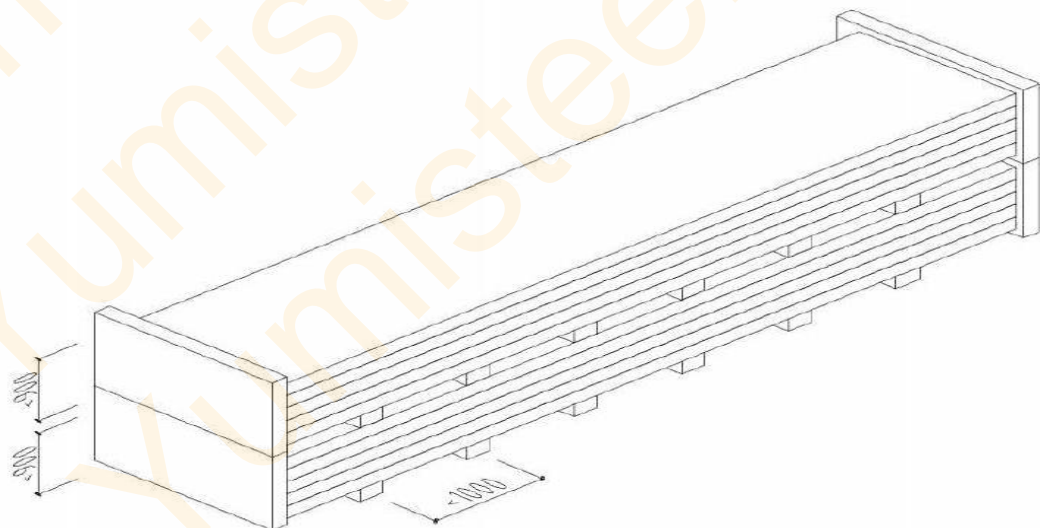




Core material could be PU/PU&Rock wool/PU & Grass wool.

### 3, Panel site handling manual:

#### 1) Storage:



A, The stacking location must be flat, strong, clean, and ventilated. The yard should be as close as possible to the area where the siding is installed to avoid long-distance secondary transportation.

B, When stacking, please pay attention to adjust the height with the sleepers, and make roof sandwich panel has a tilt angle of 2°-5° after stacking, so that even if water flows between the outer roof sandwich panels, the water will not stay on external roof panel. If roof panels are placed outdoors, it must be covered by tarpaulin. And it must be completely covered, especially when core material is rock wool or glass wool, the exposed part should be strengthened to avoid damage to the core material due to rain.

C, Roof sandwich panels stacking should be kept away from other exposed steel materials, in order to prevent the rust on these steel materials from falling and adhering to the outer wall sandwich panels. It is difficult to remove, and will cause rust spots and penetrate into the steel sheet.

D, When roof panels are stacked one on another, please don't place more than two piles per stack. Heavy objects and pedals cannot be placed on roof sandwich panels to

avoid damage to the top coating or even the steel sheet.

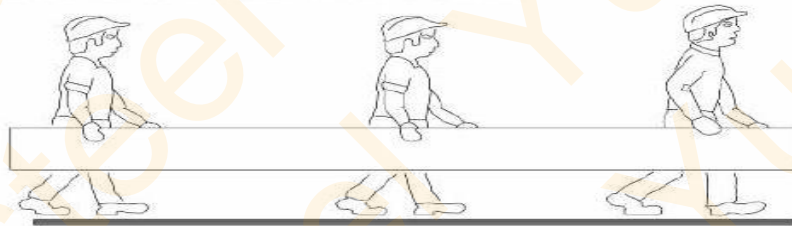
**E**,The roof sandwich panel is wrapped with a polyethylene protective film. The film cannot be exposed to direct sunlight for a long time, otherwise the protective film will be difficult to tear off.

**F**,Regarding flashings,they must also be stacked neatly. If it is placed outdoors, it must be completely covered with a tarpaulin.

## 2)Carrying:

**Lift the edge of the panel vertically to get the best strength.**

A. 竖直提起面板边缘以获最好强度。



**The twisting of the ends and parallel sides of the lifting panel can cause damage to the panel.**

B. 提面板的两端及平行边的扭转会造成损坏。

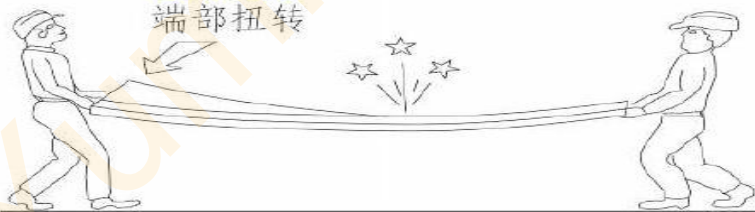
**Forbid**  
禁止

**Flat lifting will break**  
平抬折断



**Forbid**  
禁止

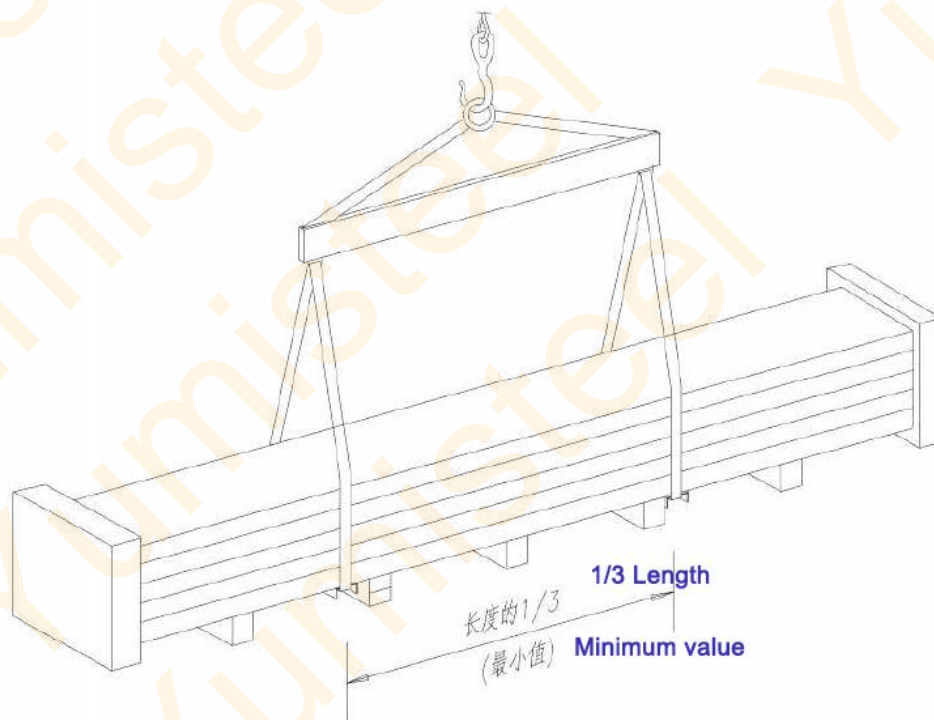
**End twist**  
端部扭转





Protective gloves and goggles must be used throughout the manual handling. For the handling of a single façade, the length of the slab should be lifted by 3" '5 people, so as not to deform the siding. To prevent the interface from being damaged, the flat can not be picked up at the interface. When transporting, do not drag roof panels on the surface of the object, and do not drag roof panels to each other to avoid damage to the topcoat. Avoid bending when handling. Bending will rupture the core of the panel and permanently deform the inner and outer surfaces.

### 3) Hoisting



The bundled roof panels are lifted and cannot be directly



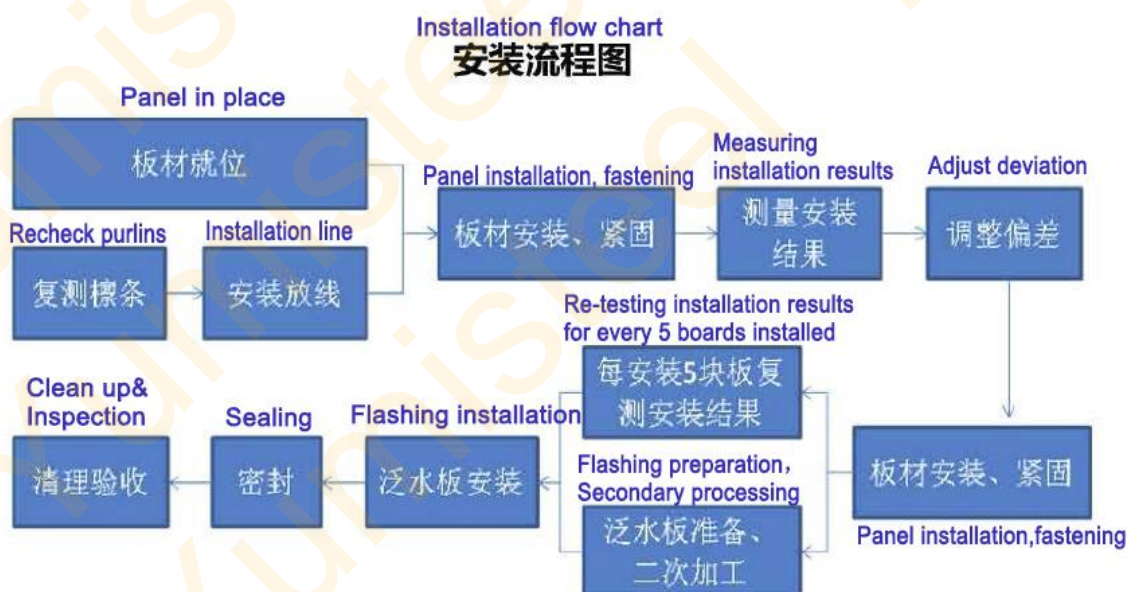
lifted by a triangle between the hooks and roof panels. Instead, the spreaders and booms provided by the project must be used to vertically lift the slings from roof panels and the booms. Find a lifting balance point and lift it. To lift the bundle in a single bundle, handle it with care and do not drag the panel.

#### 4, Roof sandwich panel installation:

The installation of the color steel enclosing structure is a very important part, and must be paid enough attention.

The same materials will have different results when installed by different teams.

##### 1) Preparation and handover inspection:



##### 1, Handover inspection and installation preparation:

A) Handover inspection:checking if purlins' installation could meet up steel structural installation conditions,which is including the offset, perpendicularity, bending height and the construction requirements of purlin mounting line.

B) Material preparation:Detailed check of the specifications, models, quantities, connectors, and specifications of the roof panels corresponding to the layout drawings.

C) Machine Preparation: Lifting equipment, hand tools, power connections, scaffolding and other temporary small accessories.

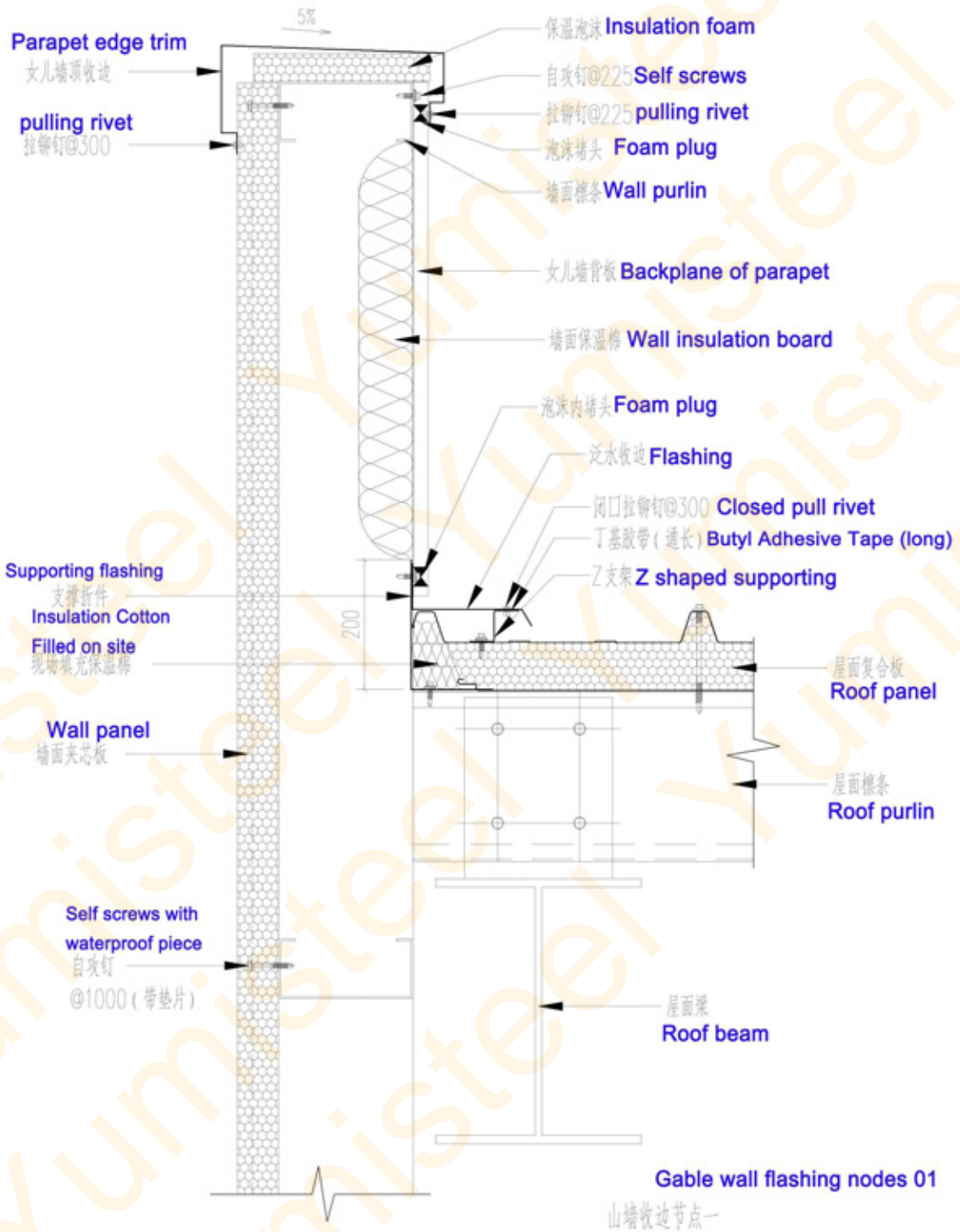
D) Technical preparation: detailed construction drawings, layout drawings, joint construction drawings, etc.

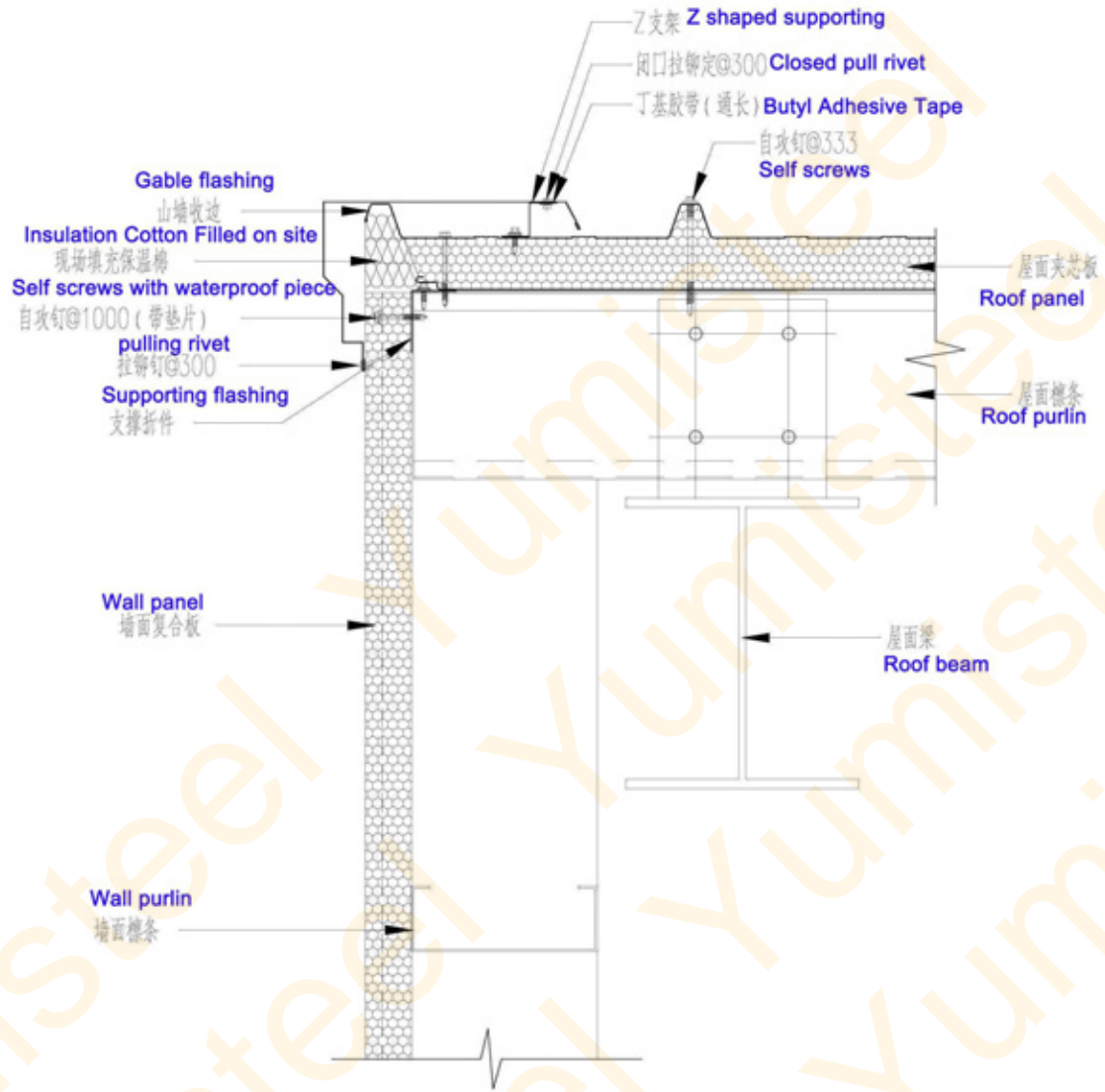
E) Preparation of site and temporary facilities: loading and unloading conditions, equipment walking route, lifting position, horse road setting, construction road, 11 installation location.

Before the construction, special project personnel should carry out the technical disclosure of the construction technicians to ensure the smooth progress of the construction and the guarantee of the project quality.

## 2) Installation nodes drawing:

### A, Gable wall flashing node drawing:

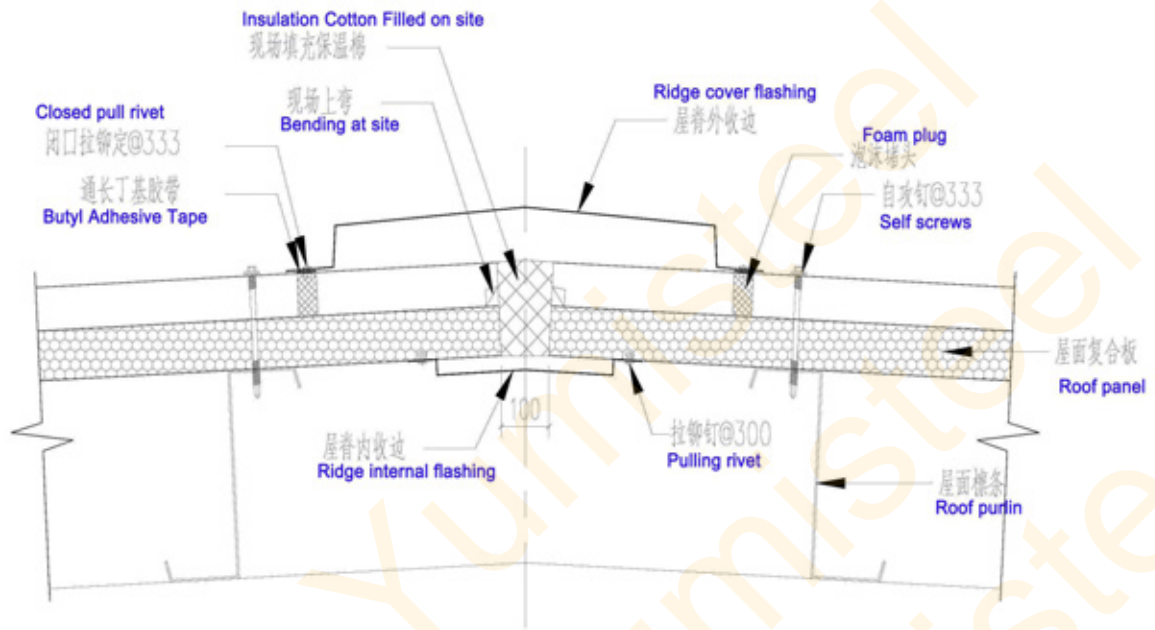




Gable wall flashing nodes 02

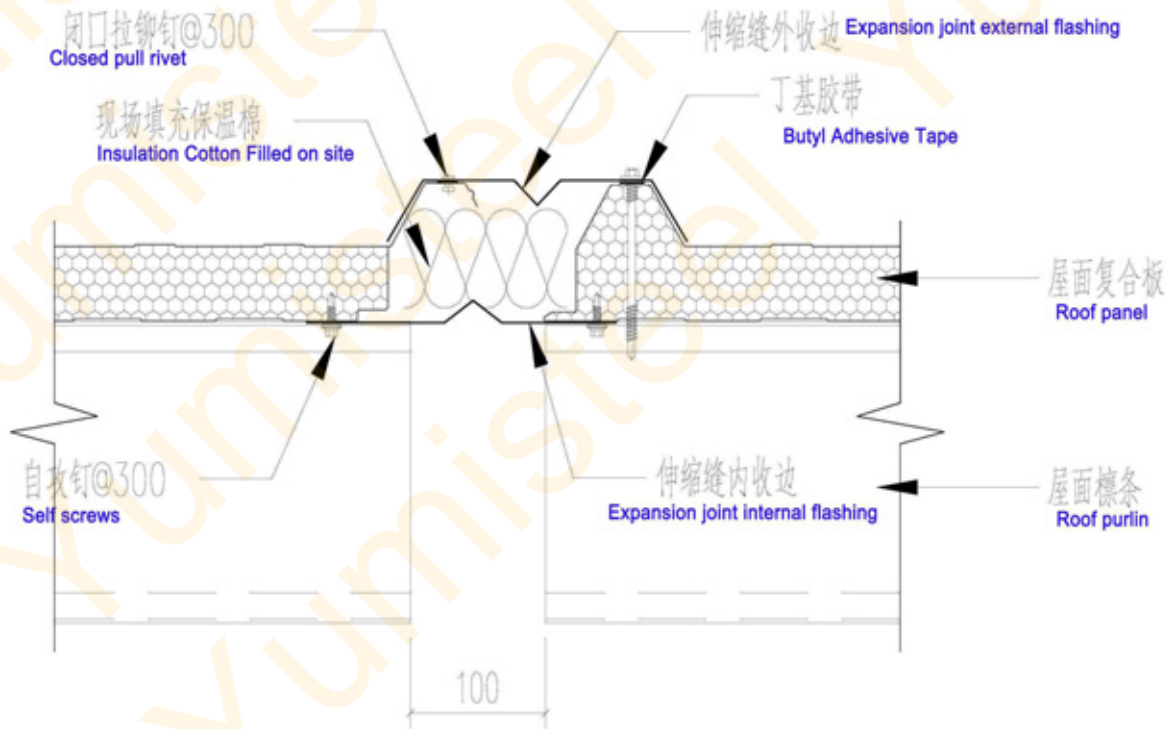
山墙收边节点二

**B, Ridge cover flashing node drawing:**



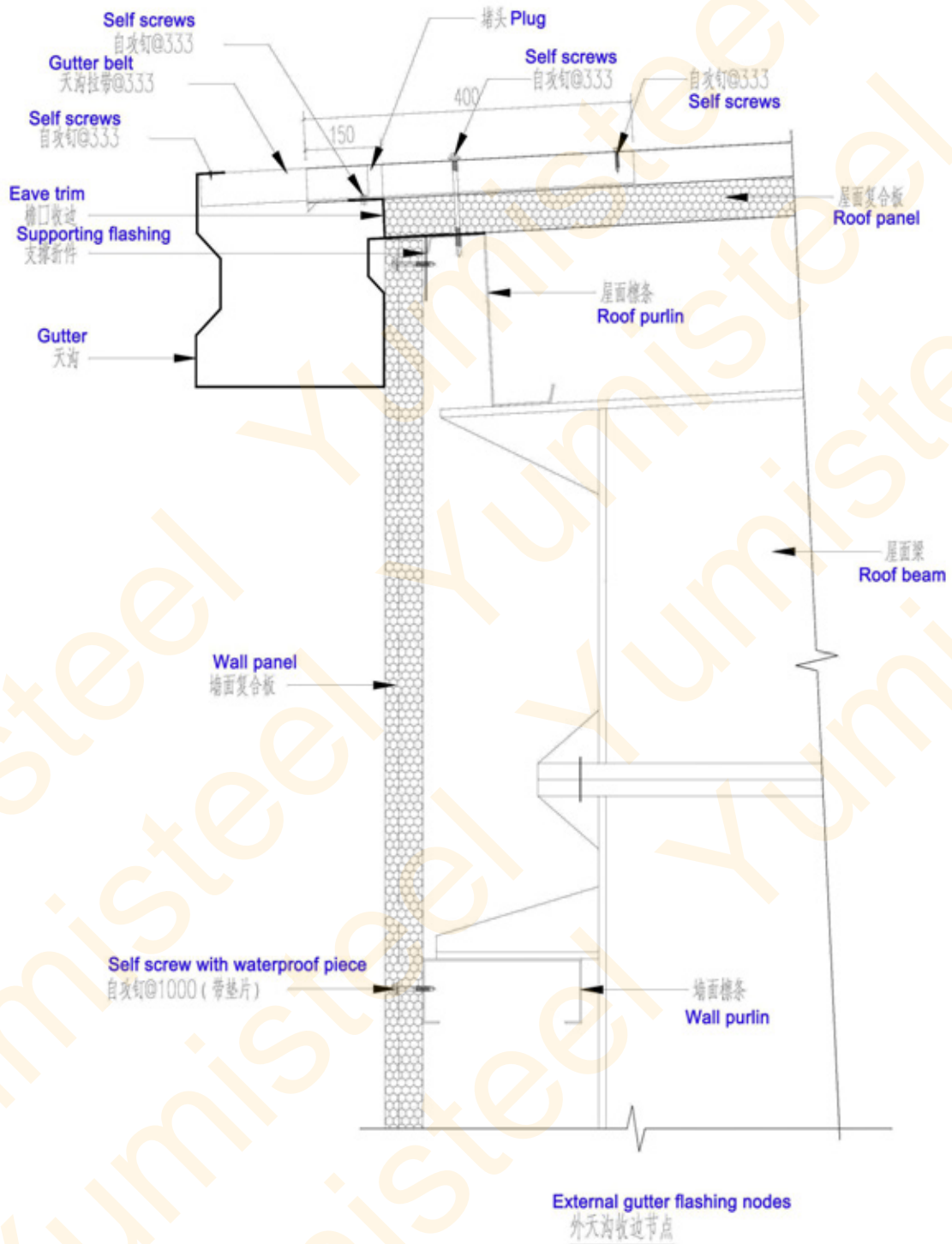
屋脊收边节点 Ridge cover flashing node drawing

**C, Expansion joint nodes drawing:**

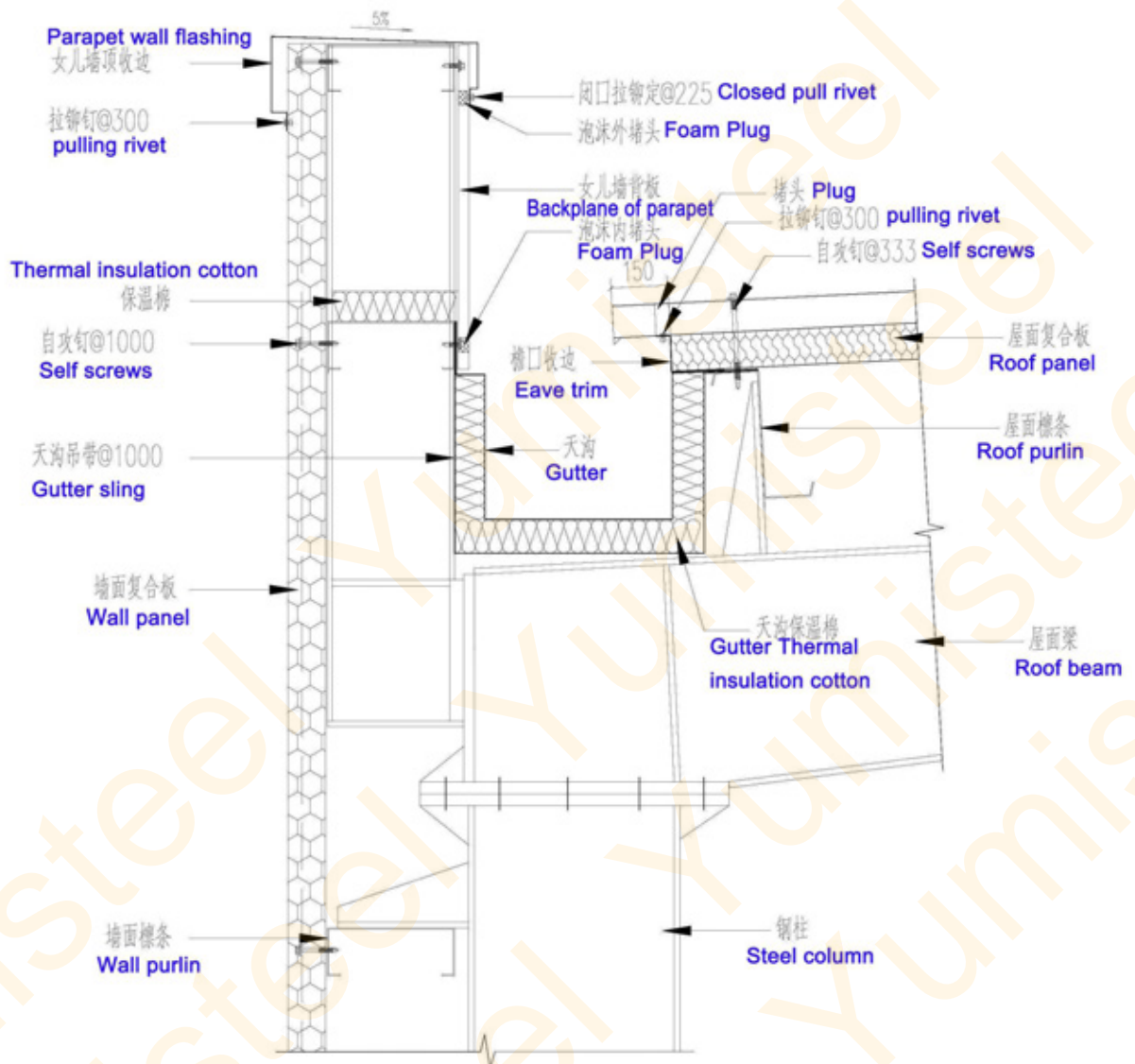


Expansion joint nodes drawing

### D, External gutter flashing nodes:



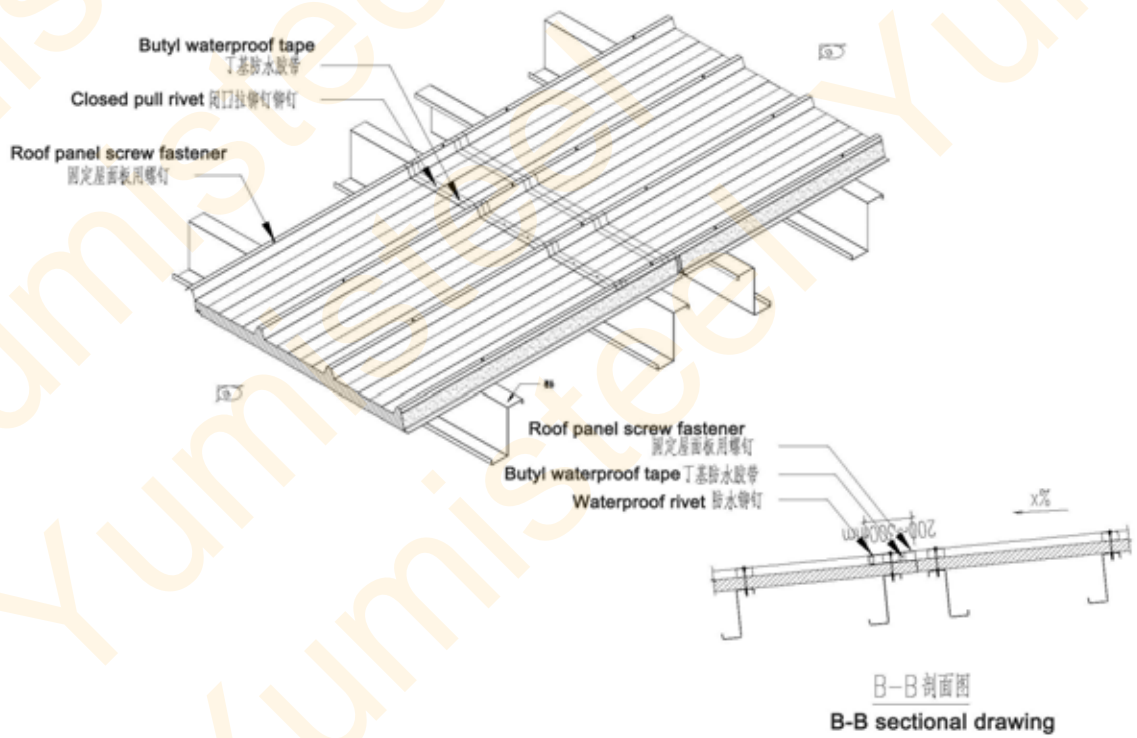
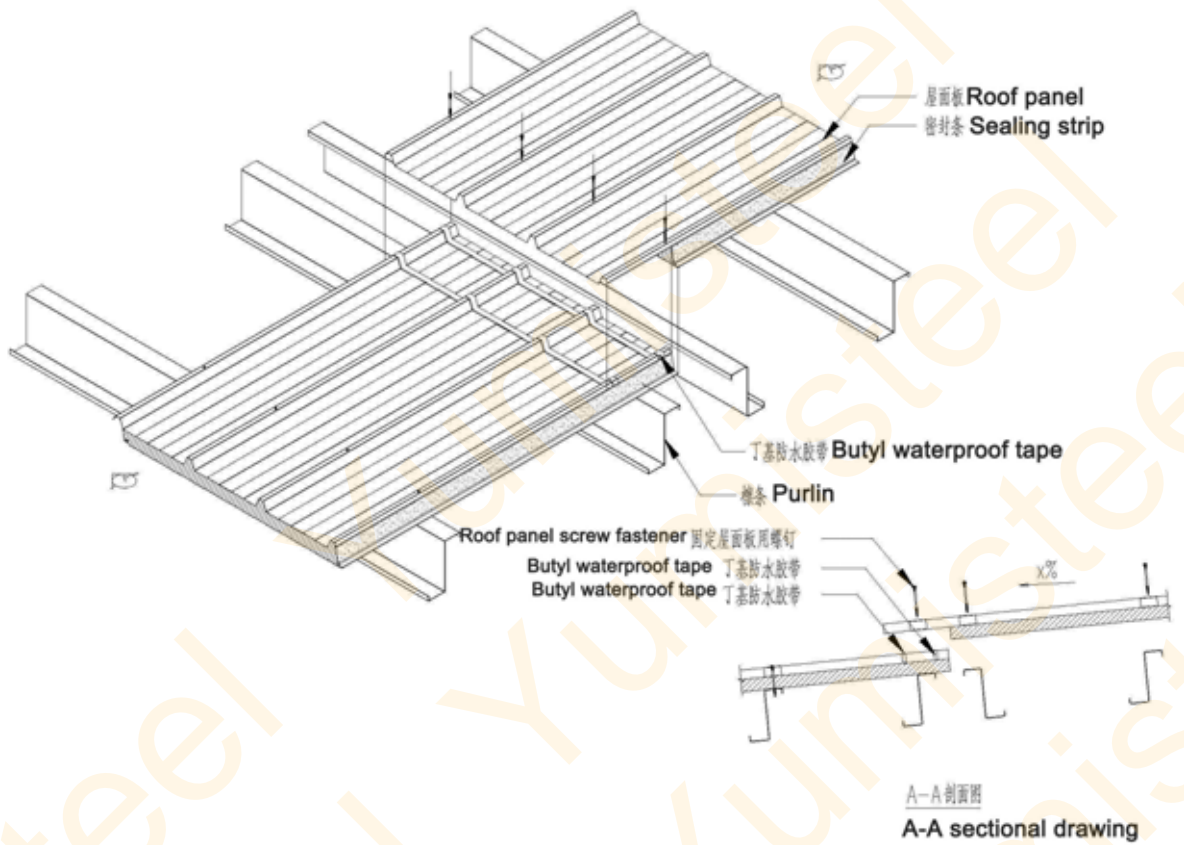




External gutter flashing nodes  
外天沟收边节点一

**E, Sectional node drawing:**





## 5,Notes:

1. After the materials arrive at site, please check the quantity of each item carefully and see if any transport damage happened, according to the delivery list. If you found out any missing or panel damage, please check if it is indicated on the invoice or not, also immediately notify the relevant service department of Yumi steel.
2. The small piece of material, for example fasteners, connecting pieces and sealants should be placed in safe place, it's better to be locked, in case of theft.
3. Please don't use the dirty gloves to handle and install wall panels and edge trims (flashings), especially galvalume material and edge trims, in order to avoid the dirt appeared on wall panels and edge trims surface, and it's hard to clear and will have effects on aesthetic.
4. All the parts that need sealants should wipe the attachment surface clean, to make sure there is good adhesion on color steel. The glue joint should be full and dense to avoid water leakage.
5. During the installation process, wall panel maybe damaged by collision and friction with the scaffold, column, brick wall, etc. So please be careful about this point.

6. During the on-site cutting process of wall panel, the bottom surface of the cutting machine should not be in direct contact with the color steel surface. It's best padded with thin plywood on the panel, then cut. The burrs on the cutting end need to be removed and installed in time.

7. Iron scraps are generated after cutting and drilling holes, and these iron filings on panel surface need to be cleaned. These iron scraps must be cleaned up in time and must not be left overnight. Iron filings can rust in a humid environment. The rust spots are verified to be removed after the surface of the board is formed, and the paint surface or even the substrate may be damaged for a long time. Similarly, other cut-off color steel heads, iron bars pulled by aluminum alloy steel nails, etc. should be cleaned up in time.

8. After the daily installation work is completed, all the debris left on the site must be cleaned up.